

## Product datasheet for **RC200704**

### **NCF2 (NM\_000433) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NCF2 (NM_000433) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NCF2
Synonyms:	NCF-2; NOXA2; P67-PHOX; P67PHOX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC200704 representing NM\_000433  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCCTGGTGGAGCCATCAGCCTCTGGAATGAAGGGGTGCTGGCAGCGGACAAGAAGGACTGGAAGG  
 GAGCCCTGGATGCCTTCAGTGCCGTCCAGGACCCCACTCCCGGATTTGCTTCAACATTGGCTGCATGTA  
 CACTATCCTGAAGAACATGACTGAAGCAGAGAAGGCCTTTACCAGAAGCATTAAACCGAGACAAGCACTTG  
 GCAGTGGCTTACTCCAACGAGGGATGCTCTACTACCAGACAGAGAAATATGATTTGGCTATCAAAGACC  
 TTAAGAAGCCTTGATTAGCTTCGAGGGAACAGCTGATAGACTATAAGATCCTGGGGCTCCAGTTCAA  
 GCTGTTTGCCTGTGAGGTGTTATATAACATTGCTTTTCATGTATGCCAAGAAGGAGGAATGGAAAAAGCT  
 GAAGAACAGTTAGCATTGGCCACGAGCATGAAGTCTGAGCCAGACATCCAAAAATCGACAAGGCGATGG  
 AGTGTGCTGGAAGCAGAAGCTATATGAGCCAGTGGTATCCCTGTGGCAGGCTGTTTCGACCAATGA  
 GAGACAAGTGGCTCAGCTGGCCAAGAAGGATTACCTAGGCAAGGCAACGGTCGTGGCATCTGTGGTGGAT  
 CAAGACAGTTTCTCTGGGTTTGCCTCTGCAACCACAGGCAGCTGAGCCTCCACCCAGACCGAAAAACC  
 CAGAGATCTTCAGGGCTCTGGAAGGGGAGGCTCACCGTGTGCTATTTGGGTTTGTGCCTGAGACAAAAGA  
 AGAGCTCCAGGTCATGCCAGGGAACATTGTCTTTGTCTTGAAGAAGGGCAATGATAACTGGGCCACGGTC  
 ATGTTCAACGGGCAGAAGGGGCTTGTCCCTGCAACTACCTTGAACCAAGTTGAGCTGCGGATCCACCCTC  
 AGCAGCAGCCCCAGGAGGAAAGCTCTCCGCAGTCCGACATCCAGCTCCTCCTAGTTCCAAAGCCCTGG  
 AAGACCCAGCTGTCACCAGGCCAGAAAACAAAAGAAGAGCCTAAGGAAGTGAAGCTCAGTGTCCCATG  
 CCCTACACACTCAAGGTGCACTACAAGTACACGGTAGTCATGAAGACTCAGCCCGGGCTCCCTACAGCC  
 AGGTCGGGACATGGTGTCTAAGAAAACCTGGAGCTCCGGCTGGAACAAACTAAGCTGAGCTATCGGCTCG  
 GGACAGCAATGAGCTGGTGCCCTTTCAGAAGACAGCATGAAGGATGCCTGGGGCCAGGTGAAAAACTAC  
 TGCTGACTCTGTGGTGTGAGAACACAGTGGGTGACCAAGGCTTTCCAGATGAACCAAGGAAAGTGA  
 AAGCTGATGCTAATAACAGACAACAGAACCTCAGCTTAAAGAAAGGCAGCAAGTGGAGGCACTCTTCAG  
 TTATGAGGCTACCAACAGAGGACCTGGAGTTTCAGGAAGGGGATATAATCCTGGTGTATCAAAGGTG  
 AATGAAGAATGGCTGGAAGGGGAGTCAAAGGGGAAAGTGGGCATTTTCCCAAAGTTTTTGTGAAGACT  
 GCGCAACTACAGATTTGGAAGCACTCGGAGAGAAGTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC200704 representing NM\_000433  
 Red=Cloning site Green=Tags(s)

MSLVEAISLWNEGVLAADKKDWKDALDAFSAVQDPHSRIFCNIGMYTILKNMTEAEKAFTRSINRDKHL  
 AVAYFQRGMLYYQTEKYDLAIKDLKEALIQLRGNQLIDYKILGLQFKLFACEVLNYIAFMYAKKEEWKKA  
 EEQLALATSMKSEPRHSKIDKAMECVWKQKLYEPVVIPVGRFRPNERQVAQLAKKDYLGKATVVASVVD  
 QDSFSGFAPLQPQAAEPPRPKTPEIFRALEGEAHRVLFVFPETKEELQVMPGNIVFVLKKGNDNWATV  
 MFNGQKGLVPCNYLEPVELRIHPQQPQEESSPQSDIPAPPSSKAPGRPQLSPGQKQKEEPKEVKLSVPM  
 PYTLKVHYKYTVVMKTQPGLPYSQVRDMVSKLELRLEQTKLSYRPRDSNELVPLSEDSMKDAWQVKNY  
 CLTLWCENTVGDQGFPEPKSEKADANNQTTEPQLKKGQSVEALFSYEATQPEDLEFQEGDIILVL SKV  
 NEEWLEGECKGKVGIFPKVFVEDCATTDLSTREV

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg2417\\_e02.zip](https://cdn.origene.com/chromatograms/mg2417_e02.zip)

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_000433

ORF Size: 1578 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
  5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM\\_000433.4](#)

RefSeq Size: 2406 bp

RefSeq ORF: 1581 bp

Locus ID: 4688

UniProt ID: [P19878](#)

Cytogenetics: 1q25.3

**Domains:** PB1, TPR, SH3

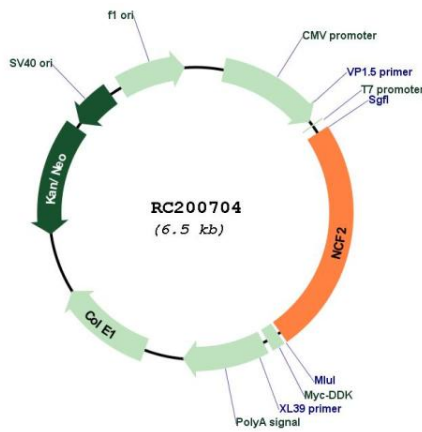
**Protein Families:** Druggable Genome

**Protein Pathways:** Leukocyte transendothelial migration

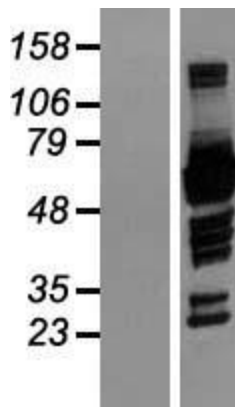
**MW:** 59.6 kDa

**Gene Summary:** This gene encodes neutrophil cytosolic factor 2, the 67-kilodalton cytosolic subunit of the multi-protein NADPH oxidase complex found in neutrophils. This oxidase produces a burst of superoxide which is delivered to the lumen of the neutrophil phagosome. Mutations in this gene, as well as in other NADPH oxidase subunits, can result in chronic granulomatous disease, a disease that causes recurrent infections by catalase-positive organisms. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jun 2010]

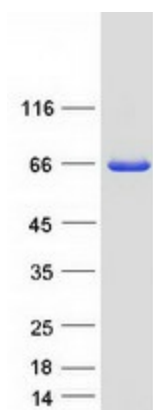
**Product images:**



Circular map for RC200704



Western blot validation of overexpression lysate (Cat# [LY426836]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225899] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NCF2 protein (Cat# [TP300704]). The protein was produced from HEK293T cells transfected with NCF2 cDNA clone (Cat# RC200704) using MegaTran 2.0 (Cat# [TT210002]).